

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse Pro-HGF Activator in direct ELISAs. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant mouse Pro-HGF Activator Gln35-Ser653 Accession # Q9R098 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

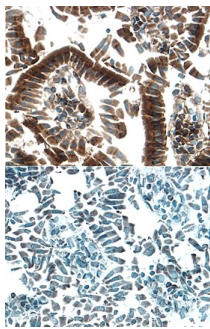
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------------|----------------------------------|--|
| Western Blot | 0.1 µg/mL | Recombinant Mouse Pro-HGF Activator |
| Immunohistochemistry | 5-15 µg/mL | See Below |
| Immunoprecipitation | 25 µg/mL | Conditioned cell culture medium spiked with Recombinant Mouse Pro-HGF Activator, see our available Western blot detection antibodies |

DATA

Immunohistochemistry



HGF Activator in Mouse Intestine. HGF Activator was detected in perfusion fixed frozen sections of mouse intestine using Goat Anti-Mouse Pro-HGF Activator Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1715) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling when primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. Specific staining was localized to cytoplasm. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Pro-HGF-A (Hepatocyte growth factor activator protein) is a 96 kDa member of the PA-FXII-HGFA family of enzymes. It is secreted by hepatocytes and is found in plasma at approximately 40 nM concentration. Other cells selectively reported to express HGF-A include astrocytes, endothelium, fibroblasts and macrophages. Upon activation, HGF-A is known to activate both proHGF and proMSP via proteolytic cleavage. The circulating 96 kDa form of mouse HGF-A represents an inactive 619 amino acid (aa) proform (aa 35-653). Within this proform exists one FN type II domain (aa 100-147), an EGF-like domain (aa 157-195), an FN type III domain (aa 197-237), a second EGF-like domain (aa 238-276), a kringle domain (aa 283-364) and a functional peptidase S1 domain (aa 406-644). Activation of HGF-A typically occurs with a thrombin-mediated cleavage between Arg405-Ile406 and a KLK cleavage between Arg369-Val370. This creates a 34 kDa heterodimeric active product that contains a 2 kDa N-terminus (aa 370-405) disulfide linked to a 32 kDa C-terminus (aa 406-653). Once activated, the 34 kDa heterodimer binds to cell surface HAI-1, rendering it unavailable to circulating HGF. When needed, this HGF-A:HAI-1 complex is released, HGF-A dissociates from HAI-1, and HGF-A is free to activate proHGF. Over aa 35-653, mouse HGF-A shares 92% and 82% aa identity with rat and human HGF-A, respectively.